AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (currently amended) An antibody comprising amino acid sequence having at least 80% homology to an amino acid sequence selected from the group consisting of SEQ ID NO: 45, SEQ ID NO: 46, SEQ ID NO: 47, SEQ ID NO: 48, SEQ ID NO: 49, SEQ ID NO: 50, SEQ ID NO: 51, SEQ ID NO: 52, SEQ ID NO: 53, SEQ ID NO: 54, SEQ ID NO: 55, SEQ ID NO: 56, SEQ ID NO: 57, SEQ ID NO: 58, SEQ ID NO: 59, SEQ ID NO: 60, SEQ ID NO: 61, and SEQ ID NO: 62, wherein the antibody binds to human DC-SIGN.

2. (original) The antibody of claim 1 further comprising a peptide attached to the antibody.

3. (original) The antibody of claim 2 wherein the peptide comprises an antigen.

4. (original) The antibody of claim 3 wherein the antigen comprises a cancer antigen.

5. (original) A vaccine comprising the antibody of claim 3.

6. (original) A vaccine comprising the antibody of claim 4.

7. (original) A composition comprising an antibody as in claim 1 and a pharmaceutically acceptable carrier.

8. (original) An antibody as in claim 1 wherein the antibody is a humanized antibody.

9. (original) An antibody as in claim 1 wherein the antibody is an scFv.

10. (currently amended) An antibody as in claim 1 ~~that binds to human DC-SIGN~~ comprising an amino acid sequence selected from the group consisting of ~~SNDGYYS (SEQ ID NO: 47); RYYLGVD (SEQ ID NO: 48); DDSGRFP (SEQ ID NO: 49);~~ SNDGYYS (SEQ ID NO: 47), RYYLGVD (SEQ ID NO: 48), DDSGRFP (SEQ ID NO: 49),

YGYAVDY (SEQ ID NO: 50), YYGIYVDY (SEQ ID NO: 51), FLVY (SEQ ID NO: 52), NFGILGY (SEQ ID NO: 53), YPNALDY (SEQ ID NO: 54) and GLKSFYAMDH (SEQ ID NO: 55).

11. (original) An antibody as in claim 10 wherein said amino acid sequence appears in the heavy chain CDR3 of the antibody.

12. (currently amended) An antibody as in claim 1 ~~that binds to human DC-SIGN~~ comprising an amino acid sequence selected from the group consisting of ~~QHFWNTPWT (SEQ ID NO: 45); QQGHTLPYT (SEQ ID NO: 46);~~ QHFWNTPWT (SEQ ID NO: 45), QQGHTLPYT (SEQ ID NO: 46), QQGKTLPWT (SEQ ID NO: 56), QQGNTLPPT (SEQ ID NO: 57), QQHYITPLT (SEQ ID NO: 58), QQYGNLPYT (SEQ ID NO: 59), QQYYSTPRT (SEQ ID NO: 60), GQSYNYPPT (SEQ ID NO: 61) and WQDTHFPHV (SEQ ID NO : 62).

13. (original) An antibody as in claim 12 wherein said amino acid sequence appears in the light chain CDR3 of the antibody.

14. (original) A method for interfering with the interaction of DC-SIGN expressing cells and ICAM-expressing cells comprising administering to a subject an effective immune-modulating amount of an antibody in accordance with claim 1.

15. (original) A method for generating an immune response comprising administering to a subject an effective immune-modulating amount of an antibody in accordance with claim 2.

16. (original) A method for interfering with the interaction of DC-SIGN expressing cells and ICAM-expressing cells comprising administering to a subject an effective immune-modulating amount of an antibody in accordance with claim 10.

17. (original) A method for interfering with the interaction of DC-SIGN expressing cells and ICAM-expressing cells comprising administering to a subject an effective immune-modulating amount of an antibody in accordance with claim 12.

18. (currently amended) A method for delivering an antigen to DC-SIGN expressing cells comprising attaching said antigen to an antibody ~~comprising an amino acid~~

~~sequence having at least 80% homology to an amino acid sequence selected from the group consisting of SEQ ID NO: 45, SEQ ID NO: 46, SEQ ID NO: 47, SEQ ID NO: 48, SEQ ID NO: 49, SEQ ID NO: 50, SEQ ID NO: 51 SEQ ID NO: 52, SEQ ID NO: 53, SEQ ID NO: 54, SEQ ID NO: 55, SEQ ID NO: 56, SEQ ID NO: 57, SEQ ID NO: 58, SEQ ID NO: 59, SEQ ID NO: 60, SEQ ID NO: 61, and SEQ ID NO: 62, wherein the antibody binds to human DC-SIGN~~ of claim 1.

19. (currently amended) An antibody ~~that recognizes a DC-SIGN receptor on a cell comprising an amino acid sequence having at least 80% homology to an amino acid sequence selected from the group consisting of SEQ ID NO: 45, SEQ ID NO: 46, SEQ ID NO: 47, SEQ ID NO: 48, SEQ ID NO: 49, SEQ ID NO: 50, SEQ ID NO: 51 SEQ ID NO: 52, SEQ ID NO: 53, SEQ ID NO: 54, SEQ ID NO: 55, SEQ ID NO: 56, SEQ ID NO: 57, SEQ ID NO: 58, SEQ ID NO: 59, SEQ ID NO: 60, SEQ ID NO: 61, and SEQ ID NO: 62, the antibody being capable of effectively blocking binding of a virus selected from the group consisting of HIV, HCV, Ebola, SARS, CMV, Sindbis and Dengue to the cell~~ in accordance with claim 1, the antibody being capable of effectively blocking at least one of the following: (i) binding of a virus selected from the group consisting of HIV, HCV, Ebola, SARS, CMV, Sindbis and Dengue to the cell, (ii) infection of the cell by a virus selected from the group consisting of HIV, HCV, Ebola, SARS, CMV, Sindbis and Dengue, (iii) transmission of a virus selected from the group consisting of HIV, HCV, Ebola, SARS, CMV, Sindbis and Dengue from the cell to another cell, (iv) binding of a bacterium selected from the group consisting of Helicobacter pylori, Klebsiella pneumoniae, Mycobacterium tuberculosis and Mycobacterium bovis to the cell, (v) infection of the cell by a bacterium selected from the group consisting Helicobacter pylori, Klebsiella pneumoniae, Mycobacterium tuberculosis and Mycobacterium bovis, (vi) transmission of a bacterium selected from the group consisting Helicobacter pylori, Klebsiella pneumoniae, Mycobacterium tuberculosis and Mycobacterium bovis from the cell to another cell, (vii) binding of a parasite selected from the group consisting of Leishmania pifanoi and Schistosoma mansoni to the cell, (viii) infection of the cell by a parasite selected from the group consisting of Leishmania pifanoi and Schistosoma mansoni, or (ix) transmission of a parasite selected from the group consisting of Leishmania pifanoi and Schistosoma mansoni from the cell to another cell.

20. (original) An antibody in accordance with claim 19, wherein the antibody also binds to L-SIGN.

Claims 21-30 (canceled).

31. (original) A diagnostic agent for a tumor characterized by increased DC-SIGN expression comprising an antibody that recognizes a DC-SIGN receptor.

32. (original) A diagnostic kit comprising the diagnostic agent of claim 31.

33. (currently amended) A method for diagnosing cancer comprising:

obtaining a tissue sample from a subject suspected of having cancer; and

determining the degree to which the tissue sample binds with an antibody ~~that recognizes a DC-SIGN receptor having at least 80% homology to an amino acid sequence selected from the group consisting of SEQ ID NO: 45, SEQ ID NO: 46, SEQ ID NO: 47, SEQ ID NO: 48, SEQ ID NO: 49, SEQ ID NO:50, SEQ ID NO: 51 SEQ ID NO: 52, SEQ ID NO: 53, SEQ ID NO: 54, SEQ ID NO: 55, SEQ ID NO: 56, SEQ ID NO: 57, SEQ ID NO: 58, SEQ ID NO: 59, SEQ ID NO: 60, SEQ ID NO: 61, and SEQ ID NO: 62~~ of claim 1.

wherein an increase in the degree of binding compared to corresponding normal tissue indicates the presence of cancer.

34. (original) A method as in claim 33 wherein the determining step comprises staining for the presence of DC-SIGN.

35. (currently amended) A therapeutic agent for treating a cancer characterized by increased DC-SIGN expression comprising an antibody ~~that recognizes a DC-SIGN receptor having at least 80% homology to an amino acid sequence selected from the group consisting of SEQ ID NO: 45, SEQ ID NO: 46, SEQ ID NO: 47, SEQ ID NO: 48, SEQ ID NO: 49, SEQ ID NO: 50, SEQ ID NO: 51 SEQ ID NO: 52, SEQ ID NO: 53, SEQ ID NO: 54, SEQ ID NO: 55, SEQ ID NO: 56, SEQ ID NO: 57, SEQ ID NO: 58, SEQ ID NO: 59, SEQ ID NO: 60, SEQ ID NO: 61, and SEQ ID NO: 62~~ of claim 1.

36. (currently amended) A method for treating a cancer comprising administering to a subject a cancer cell killing amount of a composition comprising an antibody ~~that recognizes a DC-SIGN receptor having at least 80% homology to an amino acid sequence selected from the group consisting of SEQ ID NO: 45, SEQ ID NO: 46, SEQ ID NO: 47, SEQ ID NO: 48, SEQ ID NO: 49, SEQ ID NO: 50, SEQ ID NO: 51 SEQ ID NO: 52, SEQ ID NO: 53, SEQ ID NO: 54, SEQ ID NO: 55, SEQ ID NO: 56, SEQ ID NO: 57, SEQ ID NO: 58, SEQ ID NO: 59, SEQ ID NO: 60, SEQ ID NO: 61, and SEQ ID NO: 62~~ of claim 1.

37. (original) The method of claim 36 wherein the antibody that recognizes the DC-SIGN receptor induces antibody-dependent cellular cytotoxicity of cancer cells.

38. (original) The method of claim 36 wherein the antibody that recognizes the DC-SIGN receptor induces complement-dependent cytotoxicity of cancer cells.

39. (original) The method of claim 36 wherein the antibody that recognizes the DC-SIGN receptor prevents negative regulation of the immune system through DC-SIGN expressing cancer cells.

40. (original) A method as in claim 36 wherein the antibody is fused to a toxin.

41. (original) A method as in claim 36 wherein the antibody is fused to a high energy radiation emitter.

42. (currently amended) A method for treating an inflammatory disease comprising administering to a subject a dendritic cell killing amount of a composition comprising an antibody ~~that recognizes a DC-SIGN receptor having at least 80% homology to an amino acid sequence selected from the group consisting of SEQ ID NO: 45, SEQ ID NO: 46, SEQ ID NO: 47, SEQ ID NO: 48, SEQ ID NO: 49, SEQ ID NO: 50, SEQ ID NO: 51 SEQ ID NO: 52, SEQ ID NO: 53, SEQ ID NO: 54, SEQ ID NO: 55, SEQ ID NO: 56, SEQ ID NO: 57, SEQ ID NO: 58, SEQ ID NO: 59, SEQ ID NO: 60, SEQ ID NO: 61, and SEQ ID NO: 62~~ of claim 1.

43. (original) The method of claim 42 wherein the antibody that recognizes the DC-SIGN receptor induces antibody-dependent cellular cytotoxicity of dendritic cells.

44. (original) The method of claim 42 wherein the antibody that recognizes the DC-SIGN receptor induces complement-dependent cytotoxicity of dendritic cells.

45. (original) The method of claim 42 wherein the antibody that recognizes the DC-SIGN receptor prevents negative regulation of the immune system through DC-SIGN expressing dendritic cells.

46. (original) A method as in claim 42 wherein the antibody is fused to a toxin.

47. (original) A method as in claim 42 wherein the antibody is fused to a high energy radiation emitter.